इंटरनेट मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

"जानने का अधिकार, जीने का अधिकार"
Mazdoor Kisan Shakti Sangathan
"The Right to Information, The Right to Live"

"पुराने को छोड नये के तरफ"
Jawaharlal Nehru
"Step Out From the Old to the New"

IS 10792 (1984): Testing and acceptance criteria of pneumatic coupling between tractors and trailers [TED 22: Transport Tractors and Trailers]

"ज्ञान से एक नये भारत का निर्माण"
Satyanarayan Gangaram Pitroda
"Invent a New India Using Knowledge"

Act Number 22 of 2005
The Indian Parliament
RIGHT TO INFORMATION

Made Available By
Public.Resource.Org

"ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है"
Bhartṛhari—Nītiśatakam
"Knowledge is such a treasure which cannot be stolen"

BLANK PAGE

BRUTUM FULMEN

IGNORANTIA JURIS NON EXCUSAT

PROTECTED BY COPYRIGHT

UDC 629·114·2/·3 : 622·1·013·3/·7-85 : 620·1

IS : 10792 - 1984

(Reaffirmed 2005)

Indian Standard

TESTING AND ACCEPTANCE CRITERIA OF PNEUMATIC COUPLING BETWEEN TRACTORS AND TRAILERS

1. Scope — This standard specifies testing and acceptance criteria for pneumatic coupling between tractors and trailers as specified in IS : 9905-1981 'Specification for pneumatic coupling between tractors and trailers'.

2. Definition — For the purpose of this standard, the following definition shall apply.

2.1 *Operative* — The term 'operative' means a coupler shall meet the following torque and leakage requirements at ambient temperature of 25 ± 5°C:

a) Coupling and uncoupling torque shall be not more than 17 N.m or less than 3N.m at 0·7 MPa and 0·0MPa line pressure respectively; and

b) A pair of coupler halves, when joined properly shall show no leakage through the body or between packing faces at 1MPa line pressure.

3. Tests — Production test based on sampling shall be applicable to those tests which require 'operative' criteria of the coupler. Rest of the tests shall be considered as type tests.

3.1 *Salt Spray Test*

3.1.1 This test is intended to determine the ability of the couplers to withstand corrosion due to atmospheric conditions.

3.1.2 The test shall be conducted according to the method specified in Appendix A of IS : 1884-1970 'Automobile electric horns'.

3.1.3 A new pair of coupler, properly joined, shall be operative after being subjected to **3.1.2**.

3.2 *Endurance Test*

3.2.1 This test shall be carried out by coupling and uncoupling the couplers for 1 000 complete cycles (coupling and uncoupling is one cycle).

3.2.2 A new pair of coupler shall be pulled apart 100 times when connected to a line having 700 kPa pressure under a gradually applied load of not less than 250 N and more than 1 300 N along the hose axis.

3.2.3 A new pair of couplers shall be operative after being subjected to **3.2.1** and **3.2.2**.

3.3 *Cold Test*

3.3.1 This test is intended to determine the ability of couplers to be used or stored at low temperature.

3.3.2 A new couplers shall be operative after being dropped from 2 m on to a concrete surface immediately after exposure to a temperature of — 40°C for 6 hours.

3.3.3 A new pair of coupler (one properly coupled and one uncoupled) shall be exposed to a temperature of — 40°C for 6 hours. While at this temperature, no leakage shall occur on the coupled pair when pressurized to 1 000 kPa and coupling torque on the uncoupled pair shall not be more than 22·5 N.m at zero line pressure.

3.4 *Dry Heat Test*

3.4.1 This test is intended to determine the ability of couplers to be stored at high temperature.

3.4.2 A new pair of coupler (one properly coupled and one uncoupled) shall be exposed to a temperature of 52°C for 24 hours. While at this temperature no leakage shall occur on the coupled pair when pressurized to 1 000 kPa and coupling torque on the uncoupled pair shall not be more than 17 N.m at zero line pressure.

Adopted 31 January 1984

© March 1984, ISI

Gr 1

INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Transport, Tractors and Trailers Sectional Committee, MCPD 10 [Ref : Doc : MCPD 10(571)]

3.5 *Damp Heat Cycling Test*

3.5.1 This test is intended to find out whether the coupler under test is suitable for operation under conditions of high relative humidity at elevated temperature.

3.5.2 This test shall be conducted according to the method specified in IS : 9000 (Part 5/Sec 1 and 2)-1981 ' Basic environmental testing procedures for electronic and electrical items, Part 5 Damp heat (cyclic) test.'

3.6 *Dust Test*

3.6.1 This test is intended to determine satisfactory performance of the couplers when operated in fine dusty atmosphere.

3.6.2 This test shall be conducted for 5 hours according to the method specified in **5.8** of IS : 3105-1980 ' General requirements for automobile lighting and signalling devices '.

3.7 *Water Spray Test*

3.7.1 This test is intended to determine the suitability of the couplers to withstand conditions of water spray.

3.7.2 This test shall be conducted according to the method specified in IS : 9000 (Part 16) - 1983 ' Basic environmental testing procedures for electronic and electrical items, Part 16 Driving rain test '. The test duration shall be 25 hours.

3.8 A new pair of couplers shall work smoothly after being subjected to **3.5**, **3.6** and **3.7**.

Printed at Printrade, New Delhi, India